AMENDMENTS

DETAILED DESCRIPTION OF THE INVENTION

Please amend the Detailed Description of the Invention as follows:

Please replace paragraph [17] with the following amended paragraph:

[17] Aspects of the present invention may be found in a system and method to effectively provide conditioned power to an external add-on card that is communicatively connected to a host computer by way of an external adaptor. The external adaptor comprises power conditioning circuitry and optional voltage conversion circuitry that facilitates the generation of an improved power source to the external card. The external adaptor establishes a secure physical connection of the external card to the host computer, facilitates communication of the external card to the host computer, and provides a power source that meets or exceeds the operating power requirements of the external card. The system and method facilitates the use of an external card having a connector that is incompatible with the PC card connector provided by the host computing device. For example, aspects of the present invention may allow a portable laptop computer having a PCMCIA connector (a specific type of PC card connector), to connect to and adequately power a compact flash (CF/CF+) card. Typically, a user uses the compact flash (CF/CF+) card with an exemplary handheld device such as a pocket PC or PDA. The user inserts the compact flash card into the handheld device to increase available memory. The external adaptor may facilitate connection of the exemplary laptop to an external card such as a compact flash (CF/CF+) card, secure digital (SD) memory card, PCMCIA card, wireless 802.11b card, modem card, or any other type of card which may be incompatible to the PC card connector provided by the host computing device. Aspects of the present invention allow a previously incompatible external card to seamlessly connect to a host computing device, and to

properly function by way of using the external adaptor. Aspects of the present invention obviate performance issues that may be related to insufficient power supplied to an external card due to current limitations posed [[a]] by host computing device's external card or PC card connector.

Please replace paragraph [19] with the following amended paragraph:

[19] Figure 2 is a detailed relational block diagram of an exemplary CF+ card adaptor in accordance with an embodiment of the invention. In reference to this embodiment, the external card that connects to the CF+ card adaptor comprises an exemplary CF+ card while the host computer provides a PCMCIA connector. In the embodiment shown in Figure 2, the CF+ card adaptor comprises a CF+ card adaptor frame 200, a mating connector to host computing device 204 (i.e., a mating connector to the host computing device's PCMCIA card connector), a CF+ connector 208, a printed circuit board (PCB) 212, a power conditioning circuitry 216, and a voltage conversion circuitry 220. The power conditioning circuitry 216 and the voltage conversion circuitry 220 may be implemented on the printed circuit board (PCB) 212. As described in Figure 1, the PCB 212 may intelligently sense that the power delivered to the CF+ card is insufficient for proper operation. As a consequence, electrical components within the printed circuit board 212 may enable or activate the power conditioning circuitry. The printed circuit board 212 may comprise electrical components capable of sensing an inadequacy of power delivered to the external card, thereby effectuating a certain voltage level (such as a digital 0 or 1) of a control signal that may be used to enable the power conditioning circuitry. As described in Figure [[1]]2, the CF+ card adapter may comprise a mapping circuitry that appropriately maps corresponding signals between the CF+ card and the host computing device. In one embodiment, the circuitry may comprise electrically conductive traces on a PCB that

maps corresponding signals between the two connectors 204, 208. As shown in Figure 2, the exemplary CF+ card slides into a suitable recess provided by the CF+ card adapter frame 200, guiding the CF+ card into the CF+ card connector 208. Also shown are one or more conductive Vcc power supply paths 224 originating from the mating connector to host computing device 204 and terminating at the power conditioning circuitry 216. These Vcc power supply paths 224 receive power provided by the host computing device. In addition, a conditioned Vcc power supply path 228 distributes conditioned power from the voltage conversion circuitry 220 to the CF+ connector. The conditioned Vcc power supply path 228 may provide power signals that have been processed by the power conditioning circuitry 216 and the voltage conversion circuitry 220. As shown, the Vcc power may be distributed from the power conditioning circuitry 216 to the voltage conversion circuitry 220. For example, the Vcc power delivered from the host through the mating connector 204 may supply the voltage conversion circuitry 220 by way of the power conditioning circuitry 216. In one embodiment, the voltage conversion circuitry 220 effects a voltage conversion of the voltage supplied to the power conditioning circuitry 216 by way of one or more conductive paths provided by the power conditioning circuitry 216 to the voltage conversion circuitry 220. In one embodiment, the voltage conversion comprises a voltage up-conversion to facilitate an increased charge to be stored in one or more capacitors located within the power conditioning circuitry 216. The voltage conversion circuitry 220 may up-convert and/or down-convert voltages, as required, in order to maximize the power stored within the PCB 212. As a result, an adequate amount of power reserve is stored within the CF+ card adaptor for eventual delivery to the CF+ card. In one embodiment, the power conditioning circuitry 216 and the voltage conversion circuitry 220 may be selectively enabled by way of intelligent circuitry residing on the PCB 212. The intelligent circuitry may comprise a voltage level sensor that monitors the power supply voltages delivered to the exemplary CF+ card. For example, the voltage level sensor may trigger use of either the power conditioning circuitry 216 or the voltage conversion circuitry 220 when a power supply voltage delivered to the CF+ card reaches an undesirable level. In another embodiment, a mechanically or electrically controlled switch enables the voltage conversion circuitry 220. In one embodiment, one or more indicators may be used to indicate when the power conditioning circuitry 216 and/or voltage conversion circuitry 220 are enabled. The one or more indicators may comprise LEDs located in the CF+ card adapter, a software generated indicator that is displayed by way of a monitor at the host computing device, or any other electrically induced indicator. When applied, the voltage conversion circuitry 220 up-converts or down-converts the voltages of power signals within the CF+ card adapter in order to maximize the power stored within the CF+ card adaptor. For example, the voltage conversion circuitry 220 may up-convert the voltages of the power signals in order to capture more power from the host computing device given a maximum current limitation of the connector of the host computing device. Prior to transmitting the power signals to the CF+ card, the voltage conversion circuitry 220 may down-convert the voltage to levels required by the CF+ card.